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SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0009

8 October 1997
11098-021-001-2221-70
DC No. A-1933

Oct 13 10 16 AM '97

Mr. Charles Schwer
Agency of Natural Resources
Vermont Department of Environmental Conservation
Hazardous Materials Management Division
103 South Main Street
Waterbury, Vermont 05671-0404

Subject: Final Site Inspection Report
Vermont Art Studio
Pittsford, Vermont
CERCLIS No. VTD982748352
TDD No. 97-02-0038

Dear Mr. Schwer:

Enclosed are two copies of the Final Site Inspection (SI) Report for the Vermont Art Studio property in Pittsford, Vermont. There were no U.S. Environmental Protection Agency Region I (EPA Region I), Office of Site Remediation and Restoration or Vermont Department of Environmental Conservation (VT DEC) comments regarding the contents of the Draft SI Report.

Please contact the undersigned at (781) 229-6430 if you have any questions regarding this report.

Very truly yours,

ROY F. WESTON, INC.
Region I START

Katharyn L. Umstot
Site Leader

David S. Gorden
Work Group Leader

KLU:klu
Enclosures
cc: L. Johnson (EPA Task Monitor)

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**FINAL SITE INSPECTION REPORT
FOR
VERMONT ART STUDIO
PITTSFORD, VERMONT**

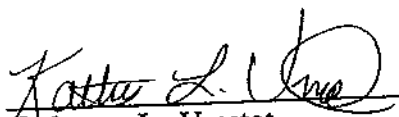
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TDD No. 97-02-0038

Prepared by:


Roy F. Weston, Inc. (WESTON®)
Superfund Technical Assessment and Response Team (START)
217 Middlesex Turnpike
Burlington, MA 01803

8 October 1997

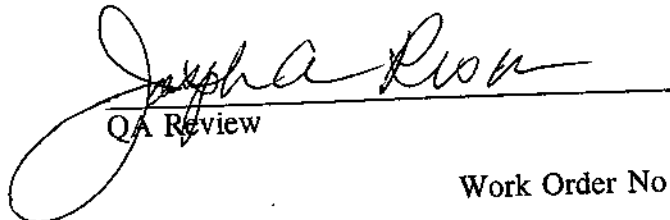
Region I START
Reviewed and Approved:


Katharyn L. Umstot
Site Leader

10/8/97
Date


David S. Gorden
Work Group Leader

10/8/97
Date


QA Review

10/8/97
Date

Work Order No. 11098-021-001-2221-70

DISCLAIMER

This report was prepared solely for the use and benefit of the U.S. Environmental Protection Agency Region I (EPA Region I), Office of Site Remediation and Restoration for the specific purposes set forth in the contract between the EPA Region I and the Roy F. Weston, Inc. (WESTON®), Superfund Technical Assessment and Response Team (START). Professional services performed and reports generated by START have been prepared for EPA Region I purposes as described in the START contract. The information, statements, and conclusions contained in the report were prepared in accordance with the statement of work, and contract terms and conditions. The report may be subject to differing interpretations or misinterpretation by third parties who did not participate in the planning, research or consultation processes. Any use of this document or the information contained herein by persons or entities other than the EPA Region I shall be at the sole risk and liability of said person or entity. START, therefore, expressly disclaims any liability to persons other than the EPA Region I who may use or rely upon this report in any way or for any purpose.

TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
INTRODUCTION	1
SITE DESCRIPTION	1
OPERATIONAL AND REGULATORY HISTORY AND WASTE CHARACTERISTICS	4
WASTE/SOURCE SAMPLING	7
GROUNDWATER PATHWAY	7
SURFACE WATER PATHWAY	9
SOIL EXPOSURE PATHWAY	11
AIR PATHWAY	11
SUMMARY	13
REFERENCES	

LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Page</u>
1	Location Map	2
2	Site Sketch	3

LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
1	Past and Present Property and Company Owners of the Vermont Art Studio Property	4
2	Source Evaluation for Vermont Art Studio	6
3	Hazardous Waste Quantity for Vermont Art Studio	6
4	Public Groundwater Supply Sources Within 4-Radial Miles of Vermont Art Studio	8
5	Estimated Drinking Water Populations Served by Groundwater Sources Within 4-Radial Miles of Vermont Art Studio	9
6	Surface Water Bodies Along the 15-Mile Downstream Pathway from Vermont Art Studio	10
7	Sensitive Environments Along the 15-Mile Downstream Pathway from Vermont Art Studio	10
8	Estimated Population Within 4-Radial Miles of Vermont Art Studio	11
9	Sensitive Environments Located Within 4-Radial Miles of Vermont Art Studio	12

INTRODUCTION

The Roy F. Weston, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) was requested by the U.S. Environmental Protection Agency Region I (EPA Region I), Office of Site Remediation and Restoration to perform a Site Inspection (SI) of the Vermont Art Studio property at Route 7 in Pittsford, Vermont. Tasks were conducted in accordance with the SI scope of work and technical specifications provided by EPA Region I. A Preliminary Assessment (PA) of the Vermont Art Studio property was initiated in 1987 by the Vermont Agency of Natural Resources (VT ANR). The PA concluded that the period of disposal to the dry well was unknown. On the basis of the information provided in the PA report, the Vermont Art Studio SI was initiated.

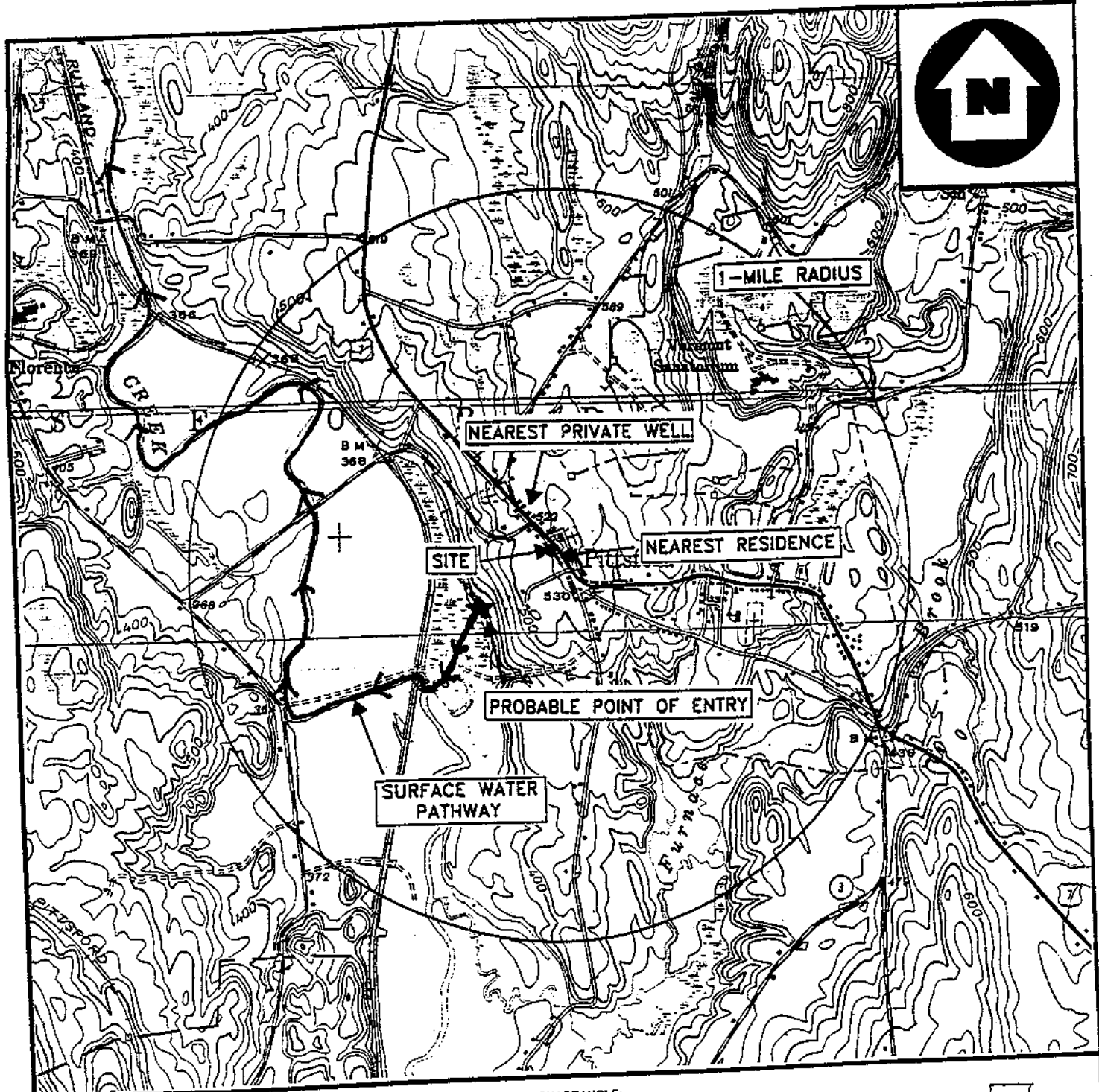
Background information used in the generation of this report was obtained through file searches conducted at the EPA Region I, Vermont Department of Environmental Conservation (VT DEC), telephone interviews with town officials, conversations with persons knowledgeable of the Vermont Art Studio property and conversations with other Federal, State, and local agencies.

This package follows the guidelines developed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, commonly referred to as Superfund. However, these documents do not necessarily fulfill the requirements of other EPA Region I regulations such as those under the Resource Conservation and Recovery Act (RCRA) or other Federal, State, or local regulations. SIs are intended to provide a preliminary screening of sites to facilitate EPA Region I's assignment of site priorities. They are limited efforts and are not intended to supersede more detailed investigations.

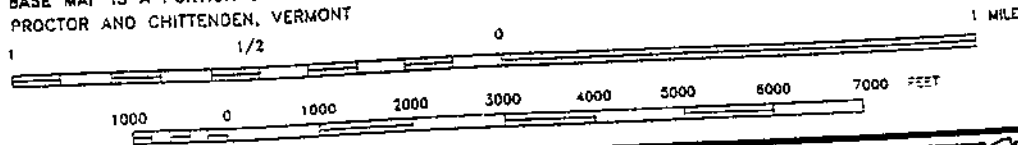
SITE DESCRIPTION

Vermont Art Studio is an active manufacturer of signs and posters and is located on Main Street in the Town of Pittsford, Rutland County, Vermont, at 43° 42' 28.0" north, and 73° 01' 46.6" west (Figure 1) [1]. The property is located on the Pittsford Plotter Map No. 20 as Lot No. 7V-86 [2]. Vermont Art Studio was established in 1954 and has remained active to the present. The property is 3.93 acres and is occupied by a print shop, an office building, a residence, and a barn. A tennis court and a grassy field comprise the remainder of the property. The property is bordered by private residences on the east and west, Main Street to the north, and farmland to the south. The northern portion of the property is sloped from northeast to southwest (Figure 2) [11].

Runoff from the property flows toward the southwest approximately 0.25 miles to a wetland area. The wetland area is the probable point of entry (PPE) to the 15-mile downstream surface water pathway. The direction of groundwater flow is unknown; however, topography of the land suggests that it mimics surface water flow direction, to the southwest [1].



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' X 7.5' U.S.G.S. QUADRANGLE:
PROCTOR AND CHITTENDEN, VERMONT



QUADRANGLE LOCATION



LOCATION MAP

VERMONT ART STUDIO
ROUTE 7
PITTSFORD, VERMONT

WESTON
MANAGERS DESIGNERS/CONSULTANTS

REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

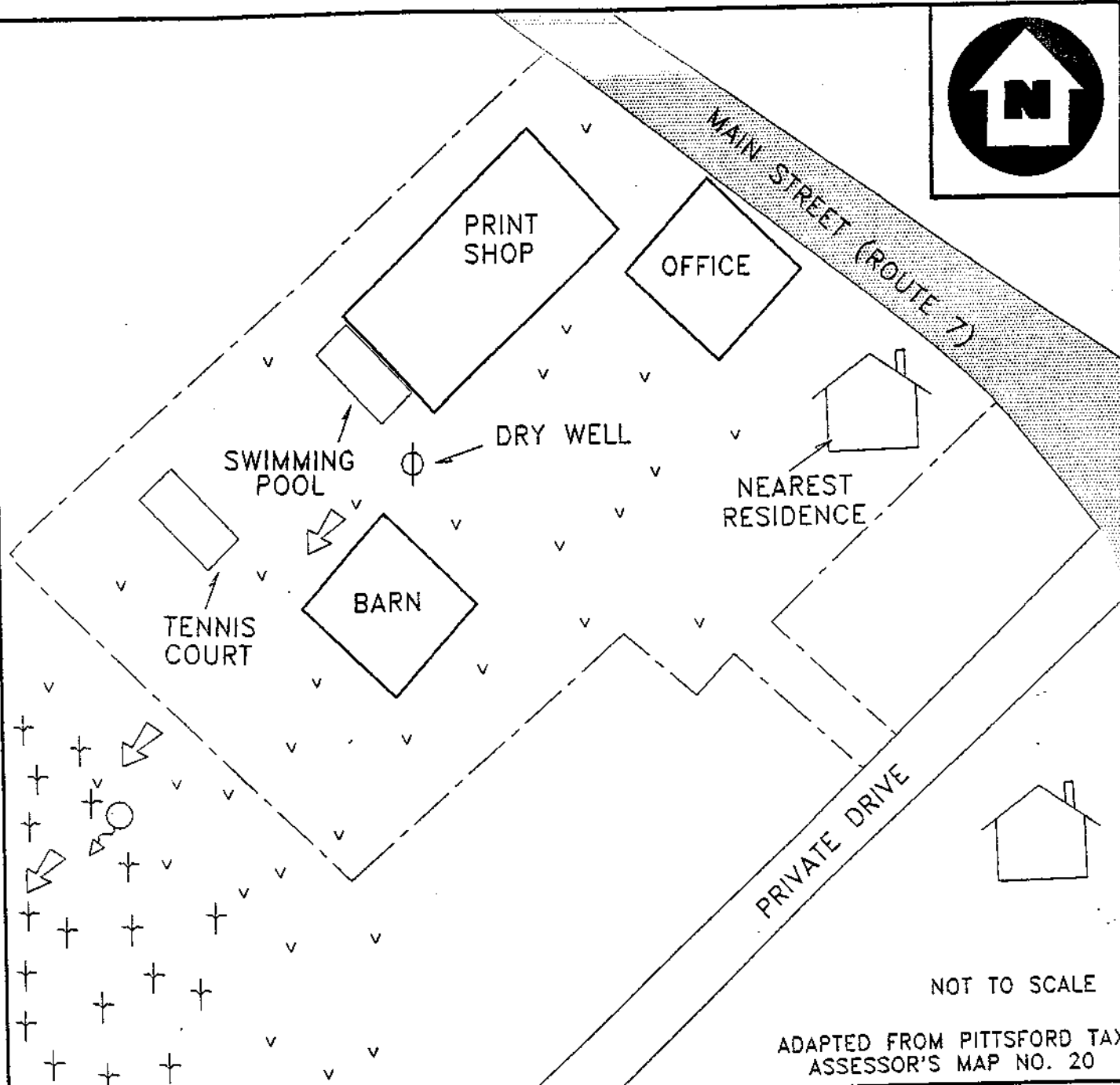
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B. OPERACH

DATE
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S:\97020038\FIG1.DWG

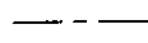
FIGURE 1



LEGEND



PAVED AREA



PROPERTY BOUNDARY



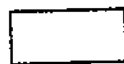
OVERLAND RUNOFF DIRECTION



CORN



DRY WELL



BUILDING



RESIDENCE



SPRING



GRASS

SITE SKETCH

VERMONT ART STUDIO
ROUTE 7
PITTSFORD, VERMONT



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD # 97-02-0038	DRAWN BY: K.UMSTOT	DATE 5/7/97
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FILE NAME: S:\97020038\FIG2.DWG	FIGURE 2
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OPERATIONAL AND REGULATORY HISTORY AND WASTE CHARACTERISTICS

The property was owned by Ms. Mary Randall Allen until 1950. Ownership prior to Ms. Allen is not known. In 1950, the Blittersdorf family purchased the property from Ms. Allen, which was occupied at that time by a barn and two buildings. In 1954, the barn was renovated and used as a screen printing shop. In 1960, additional land (which currently includes the dry well and current barn) was purchased by the Blittersdorfs [11, p. 2]. Ms. Lois Blittersdorf became the sole owner of the property in 1985. In 1987, the property was sold to Mr. and Mrs. Harold Anderson, the present property owners [4].

In 1948, Mr. Harold Blittersdorf operated an antique/book store on the property, leasing the land from Ms. Allen until 1950. In 1954, Mr. Blittersdorf established Vermont Art Studio, a photographic and printing company (Figure 2) [11, p. 2]. In 1983, Mr. Blittersdorf sold the company to his son, Mr. John Blittersdorf. In 1987, Vermont Art Studio became incorporated (Vermont Art Studio). At that time, Mr. John Blittersdorf became President and Mr. Larry Fusco became Vice President/General Manager of Vermont Art Studio [4]. Mr. Fusco became sole owner of Vermont Art Studio in 1990 [5]. Table 1 summarizes the ownership of the property, the processes utilized on the property, and the ownership of the company on the property.

Table 1

Past and Present Property and Company Owners of the Vermont Art Studio Property

Property Owner(s)	Years	Company Owner	Years	Processes
Ms. Mary Randall Allen	? to 1950	Mr. Harold Blittersdorf	1948 to ?	Retail of books
Mr. and Mrs. Harold Blittersdorf	1950 to 1987	Mr. Harold Blittersdorf	1954 to 1983	Printing and Photo Developing
Mr. and Mrs. Harold Anderson	1987 to Present	Mr. John Blittersdorf	1983 to 1990	Printing and Photo Developing
Mr. and Mrs. Harold Anderson	1987 to Present	Mr. Larry Fusco	1990	Printing and Photo Developing

? = Unknown

[4]

Vermont Art Studio manufactures signs and posters, as well as other art products. The processes include the use of photographic methods, screen art, and painting. In 1980, Mr. John Blittersdorf reported to the Vermont Agency of Environmental Conservation (VT AEC), in a Notification of Hazardous Waste Activity (NHWA) report, the use of the following chemicals: photographic developers and fixers (alkalides and acids), solvents and paint cleaning materials, and screen emulsions [6]. In 1985, Mr. Blittersdorf submitted another NHWA, reporting the use of developer and acid fixer, ammonium bichromate, and paint solvents [7].

These substances contain ketones, glycol ether, aromatic hydrocarbons, butyl cellosolve, acetate, and cyclohexanone. Chromium and lead, constituents of ink, were also reported to be used on the property [8].

In 1987, a neighbor reported to the State of Vermont the disposal of "carcinogenic waste" into a dry well located approximately 20 feet (ft) southwest of the print shop. A "kill zone" of dead vegetation was reported by the Vermont Department of Environmental Conservation (VT DEC), formerly VT AEC, to be located downgradient of the dry well [4, p. 5].

In February 1987, as a result of the report by a neighbor, a PA was conducted by VT ANR. No sampling was conducted. The PA reported that Vermont Art Studio had been disposing of process wastes such as waste photographic developers and fixers, screen emulsifiers, and dehazers into a sink drain which discharged to the dry well [4, p. 1].

The sink, located in the lower level of the office building, was used for washing ink-coated silk screens with a dehazing solution and a sodium metaperiodate solution [9]. The dry well is also connected to a swimming pool on the property. The swimming pool reportedly leaks and has not been used since 1995 [5]. According to the PA report, an additional connection existed to the dry well, located in the print shop on the property. An automatic developer without a silver recovery unit allegedly discharged waste to the dry well through this connection [9]. However, the former and current owners of both the property and the business report no knowledge of this connection [5].

At the time of the PA, approximately 20 gallons of the dehazing solution and 20 gallons of the sodium metaperiodate solution were used annually [4]. The PA reported that the period of disposal from the sink drain and the automatic developer is estimated to have occurred from 1980 to 1988, with the possibility of occurrences as early as 1949, when an antique bookshop operated on the property. However, the current owners report that the dry well was excavated in 1978 to a depth of approximately 2.5 ft by the Blittersdorfs [3; 4]. Therefore, for the purpose of this investigation, disposal is presumed to have occurred from 1980 to 1988 [3].

At the time of the PA, approximately 50 to 75 gallons of thinner were estimated to be used annually in the printing area on the second floor of the print shop. No floor drains are known to exist in the print shop [11, p. 7]. The thinner was absorbed onto paper towels and discarded in a local town landfill [9].

In March 1988, Vermont Art Studio connected the lower level sink in the office building to the public sewer line, as requested by the VT ANR [10]. Vermont Art Studio informed VT ANR that at that time period it was using biodegradable ghost/haze removers and emulsion [4, p. 6].

On 13 May 1997, START personnel conducted an on-site reconnaissance of the Vermont Art Studio property. Periodic air monitoring using a photoionization detector (PID) was conducted during the on-site reconnaissance. No readings above background were detected outside or in the office building [11, p. 3]. A reading of 0.5 units above background was recorded on the PID in the print shop, likely due to the use of solvents in the shop [11, p. 6].

START personnel observed no barriers restricting vehicular or pedestrian access to the property. No aboveground storage tanks (ASTs) were observed on the property. There was no record regarding underground storage tanks (USTs) located on the property.

Table 2 presents identified structures or areas on the Vermont Art Studio property that are documented or potential sources of contamination, the containment factors associated with each source, and the relative location of each source.

Table 2

Source Evaluation for Vermont Art Studio

Source Area	Containment Factors	Spatial Location
Dry Well	None	Approximately 20 feet (ft) southwest of the print shop.

[11, p. 5]

Table 3 summarizes the types of potentially hazardous substances which have been disposed, used, or stored on the Vermont Art Studio property.

Table 3

Hazardous Waste Quantity for Vermont Art Studio

Substance	Quantity or Volume/Area	Years of Use/Storage	Years of Disposal*	Source Area
Photographic developer	3,960 pounds	1980-1987	1980-1987	Dry well
Acid fixer	3,960 pounds	1985-1987	1985-1987	Dry well
Screen emulsions	3,000 pounds	1980-1985	1980-1985	Dry well
Ammonium bichromate	24 pounds	1985-1987	1985-1987	Dry well
Sodium metaperiodate	200 pounds	1987-1988	1987-1988	Dry well
Dehazing solution	200 pounds	1987-1988	1987-1988	Dry well

* Disposal may have occurred as early as 1978

[6; 7; 9]

There are no National Priority List (NPL) or Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites located within 1-radial mile of the Vermont Art Studio property [37]. There are four RCRA sites located in Pittsford [38].

WASTE/SOURCE SAMPLING

To date, no known source samples have been collected from the Vermont Art Studio property.

GROUNDWATER PATHWAY

The Vermont Art Studio property is located in the Otter Creek River Valley. The surficial materials on the property include stratified deposits ranging from fine sand to gravel, with a total thickness of greater than 20 ft. The surficial materials of the Otter Creek Valley include pebbly-sand, glacial lake deposits, and postglacial alluvium [4, p. 3]. Depth to bedrock in the area ranges from 30 to 200 ft below ground surface (bgs) [36]. No bedrock formation mapped within 4-radial miles of the property exhibits karst characteristics.

Depth to groundwater on the property and groundwater flow direction are unknown. Well completion logs for some private wells in Pittsford indicate the groundwater table ranges from approximately 12 to 65 ft bgs [36]. Apparent springs were located in the cornfields downslope of the property. The mean annual precipitation rate for the Pittsford area is 42.07 inches per year [4, p. 4].

The population of Pittsford is served by two public water supplies. The Pittsford Water Department (PWD) supplies water to an estimated 450 people residing mainly in the village of Pittsford, from six springs located approximately 6 miles northeast of the property [4, p. 4; 12].

The Florence Water System, also owned and operated by Pittsford, serves an estimated 150 people with one gravel-packed well. The well is located approximately 1.3 miles northwest of the property [12]. Corn Hill Estates maintains a community drinking water well, located approximately 1.3 miles southeast of the Vermont Art Studio property. This bedrock well serves an estimated 75 people [4, p. 4].

The Town of Brandon is supplied by two gravel-packed wells. These wells serve 60% to 70% of the population and are located more than 4-radial miles from Vermont Art Studio. The remainder of the population of Brandon is served by private wells [13].

The Town of Chittenden has no public water supply. An estimated 550 private wells serve the residents of the town. The locations of the private wells are not documented but are presumed to be located near the houses that they serve [14].

The Town of Proctor is served by a surface water intake on Kiln Brook, located approximately 6 miles northeast of Proctor, in Chittenden, which is not part of the 15-mile downstream surface water pathway from Vermont Art Studio. Particulate matter and bacteria are removed from Kiln Brook by a nearby filtration plant. Proctor, as well as connections along the 7 miles of pipeline connecting Chittenden to Proctor, are served by the Kiln Brook intake [15]. The Proctor Municipal Well, used only in emergencies, is located approximately 3.6 miles southwest of Vermont Art Studio. No contaminants have been detected above Vermont State requirements. This well has the capacity to serve the entire population of Proctor (an estimated 1,979 people), but has not been used since 1994 [15; 16]. For this reason, the service population apportioned to this well is 0.

The Town of Rutland is organized into three different villages: Town of Rutland, City of Rutland, and Center Rutland. The entire City of Rutland is served by the Rutland City Reservoir [17]. The Town of Rutland is supplied by 20,000 gallons of water per day from the Rutland City Reservoir [18]. The remainder of the population of the town of Rutland is supplied with drinking water by private wells. The Rutland City Reservoir is located more than 4-radial miles from the Vermont Art Studio property [1]. Center Rutland residents are supplied with water from 10 community wells, called fire districts [19]. The fire districts each supply from 50 to 500 residents with groundwater. The Rutland City Reservoir and the 10 fire districts are all located outside of 4-radial miles from Vermont Art Studio, and are not located along the 15-mile downstream surface water pathway [19].

The Town of West Rutland is supplied by two gravel-packed wells located on Fairview Road, more than 4-radial miles from the Vermont Art Studio property. There are 700 households served by these wells. The rest of the population (an estimated 2,500 people) is supplied by private drinking water wells [20]. Table 4 summarizes the public groundwater supply sources located within 4-radial miles of Vermont Art Studio.

Table 4
Public Groundwater Supply Sources Within 4-Radial Miles of
Vermont Art Studio

Distance/ Direction from Site	Source Name	Location of Source ^a	Estimated Population Served	Source Type ^b
1.3 miles northwest	Florence Well	Pittsford	150	Overburden
1.3 miles southeast	Corn Hill Estates Well	Pittsford	75	Bedrock
3.6 miles southwest	Proctor Municipal Well	Proctor	0	Overburden

^a Indicates Town in which well is located.

^b Overburden, Bedrock, or Unknown.

[4; 12; 15]

Private groundwater supplies located within 4-radial miles of the property were estimated using equal distribution calculations of U.S. CENTRACTS data identifying population, households, and private water wells within individual radial distance rings measured from the property [21]. The PA reports the nearest private well is approximately 500 ft northwest of the Vermont Art Studio property [4, Figure 3]. Pittsford could not confirm the location of the nearest private well [12]. Table 5 summarizes drinking water populations served by groundwater sources within 4-radial miles of the property.

Table 5

**Estimated Drinking Water Populations Served by Groundwater Sources
Within 4-Radial Miles of Vermont Art Studio**

Radial Distance From Vermont Art Studio (miles)	Estimated Population Served by Private Wells	Estimated Population Served by Public Wells	Total Estimated Population Served by Groundwater Sources Within the Ring
0.00 < 0.25	6	0	6
0.25 < 0.50	18	0	18
0.50 < 1.00	63	0	63
1.00 < 2.00	229	225	454
2.00 < 3.00	349	0	349
3.00 < 4.00	479	0	479
TOTAL	1,144	225	1,369

[4; 12; 21]

No known groundwater sampling has been conducted on the property to date.

SURFACE WATER PATHWAY

Based on surficial topography of the Vermont Art Studio property, overland runoff flows southwest approximately 0.25 miles to a wetland area. The runoff flows approximately 0.15 miles within the wetland to an unnamed stream. The wetland area is the PPE to the surface water pathway. Approximately 0.1 miles downstream of the PPE, the unnamed stream is presumed to drain through a culvert into Otter Creek for the remainder of the 15-mile surface water pathway [1; 22-24].

START personnel estimated the flow rate for wetlands and the unnamed stream on the 15-mile downstream surface water pathway by measuring the area of the drainage basin [in square miles (mi^2)] for each segment and multiplying the area by 1.8 cubic feet per second (cfs) per mi^2 . The estimated flow rates are for the purpose of this SI evaluation only. The estimated mean annual flow rate of the unnamed stream is 0.4 cfs, and the flow rate through the wetlands upstream of the unnamed stream is also 0.4 cfs [25].

The U.S. Geological Survey (USGS) has maintained a gaging station (No. 04282000) at Otter Creek in Center Rutland since 1928. The mean annual surface water flow in Otter Creek at Center Rutland, observed from 1928 to 1994, upstream from the PPE, is approximately 553 cfs. USGS additionally maintains a gaging station downstream of the 15-mile downstream surface water pathway terminus, in Middlebury, Vermont (No. 04282500). The observed surface water flow at Middlebury, Vermont is 997 cfs [26]. Table 6 summarizes the surface water bodies, flow characteristics, and wetland frontage along the 15-mile downstream pathway [1; 22-24; 26-33].

Table 6

**Surface Water Bodies Along the 15-Mile Downstream Pathway from
Vermont Art Studio**

Surface Water Body	Descriptor ^a	Length of Reach (miles)	Flow Characteristics (cfs) ^b	Length of Wetlands (miles)
Unnamed Stream Wetlands	Minimal stream	0.15	0.4	0.6
Unnamed Stream	Minimal stream	0.1	0.4	0.02
Otter Creek	Moderate to large stream	14.75	>553 and <997	14.8

- ^a Minimal stream <10 cfs. Small to moderate stream 10-100 cfs. Moderate to large stream >100-1,000 cfs. Large stream to river >1,000-10,000 cfs. Large river >10,000-100,000 cfs. Very large river >100,000 cfs. Coastal tidal waters (flow not applicable). Shallow ocean zone or Great Lake (flow not applicable). Moderate depth ocean zone or Great Lake (flow not applicable). Deep ocean zone or Great Lake (flow not applicable). Three-mile mixing zone in quiet flowing river 10 cfs or greater.
- ^b Cubic feet per second.

[1; 22-24; 26-33]

There are no known surface water intakes identified along the 15-mile downstream pathway from the property [12; 13; 34]. For the purpose of this evaluation, Otter Creek and the unnamed stream are considered fisheries [1]. There are an estimated 15.42 miles of wetlands located along the 15-mile surface water pathway [32]. No sensitive environments were reported by VT ANR to exist along the 15-mile downstream surface water pathway [32]. Table 7 summarizes sensitive environments along the 15-mile downstream pathway [33].

Table 7

**Sensitive Environments Along the 15-Mile Downstream Pathway from
Vermont Art Studio**

Sensitive Environment Name	Sensitive Environment Type	Water Body	Downstream Distance from PPE (miles)	Flow Rate at Environment (cfs) ^a
Unnamed Stream Wetlands	Wetlands	Minimal Stream	0	0.4
Unnamed Stream	Clean Water Act	Minimal Stream	0.15	0.4
Unnamed Stream	Wetlands	Minimal Stream	0.15	0.4
Otter Creek	Wetlands	Moderate to Large Stream	0.25	>553 and <997

^a Cubic feet per second
[27-33]

No known surface water or sediment samples have been collected from the property to date.

SOIL EXPOSURE PATHWAY

There are currently four full-time employees on the Vermont Art Studio property. The nearest residence, housing two people, is located on the property, approximately 100 ft southeast of the dry well [11, p. 3]. There are no schools or day-care centers within 200 ft of the property. There are no barriers restricting pedestrian or vehicular access to the property. No terrestrial sensitive environments were observed on the property. The estimated population located within 1-radial mile is 322 people [21].

In 1987, a neighbor reported the disposal of "carcinogenic waste" into a dry well located in the southern portion of the property. A "kill zone" of dead vegetation was reported by the VT DEC to be located downgradient of the dry well. In February 1987, as a result of this complaint, a PA inspection was conducted by the VT ANR, but they did not conduct sampling [4, p. 5].

To date, no known soil samples have been collected on the Vermont Art Studio property.

AIR PATHWAY

There are currently four full-time employees on the Vermont Art Studio property. The nearest residence is located on the property, approximately 100 ft southeast of the dry well [11, p. 3]. There are no schools or day-care centers located within 200 ft of the property. The population located within 4-radial miles is 4,560 people [21]. Approximately 1,453 acres of wetlands are located within 4-radial miles of the Vermont Art Studio property. The nearest wetland is located 0.15 miles southwest of the property [30]. Table 8 illustrates the estimated population within each target distance ring within 4-radial miles of the Vermont Art Studio property.

Table 8

Estimated Population Within 4-Radial Miles of Vermont Art Studio

Radial Distance From Vermont Art Studio (miles)	Estimated Population
0.00 < 0.25	24
0.25 < 0.50	71
0.50 < 1.00	227
1.00 < 2.00	949
2.00 < 3.00	1,490
3.00 < 4.00	1,799
TOTAL	4,560

[21]

VT ANR Department of Fish and Wildlife (DFW) reported that there are no State-listed or Federal-listed endangered or threatened species known to be located on the property or within 4-radial miles of the property [27-33]. Table 9 summarizes the sensitive environments located within 4-radial miles of Vermont Art Studio.

Table 9

Sensitive Environments Located Within 4-Radial Miles of Vermont Art Studio

Radial Distance From Vermont Art Studio (miles)	Sensitive Environment/Species Status
0.00 < 0.25	None
0.25 < 0.50	Clean Water Act
	43 acres wetlands
0.50 < 1.00	130 acres wetlands
1.00 < 2.00	330 acres wetlands
2.00 < 3.00	415 acres wetlands
3.00 < 4.00	535 acres wetlands

[27-33]

On 13 May 1997, START personnel conducted an on-site reconnaissance of the Vermont Art Studio property. Periodic air monitoring using a PID was conducted during the on-site reconnaissance. No readings above background were detected outside or in the office building [11, p. 3]. A reading of 0.5 units above background was recorded on the PID in the print shop, likely due to the use of solvents in the shop [11, p. 6]. No air samples have been collected on the Vermont Art Studio property to date.

SUMMARY

Vermont Art Studio is an active manufacturer of signs and posters and is located on Main Street in the Town of Pittsford, Rutland County, Vermont, at 43° 42' 28.0" north, and 73° 01' 46.6" west. Vermont Art Studio was established in 1954, and has remained active to the present.

Vermont Art Studio manufactures signs and posters, as well as other art products. The processes include the use of photographic methods, screen art, and painting. In 1980, Mr. John Blittersdorf reported to the Vermont Agency of Environmental Conservation (VT AEC), in a Notification of Hazardous Waste Activity (NHWA) report, the use of the following chemicals: photographic developers and fixers (alkalides and acids), solvents and paint cleaning materials, and screen emulsions. In 1985, Mr. Blittersdorf submitted another NHWA report, reporting the use of developer and acid fixer, ammonium bichromate, and paint solvents. These substances contain ketones, glycol ether, aromatic hydrocarbons, butyl cellosolve, acetate, and cyclohexanone. Chromium and lead, constituents of ink, were also reported to be used on the property. An automatic developer without a silver recovery unit allegedly discharged waste to the dry well.

In 1987, a neighbor reported to the State of Vermont the disposal of "carcinogenic waste" into a dry well located approximately 20 feet (ft) southwest of the print shop. A "kill zone" of dead vegetation was reported downgradient of the dry well.

In February 1987, as a result of the report by a neighbor, a Preliminary Assessment (PA) was conducted by the Vermont Agency of Natural Resources (VT ANR). No sampling was conducted. The PA reported that Vermont Art Studio had been disposing of process wastes such as waste photographic developers and fixers, screen emulsifiers, and dehazers into a sink drain which discharged to the dry well.

The direction of groundwater flow is unknown; however, the topography of the land suggests that it mimics surface water flow direction, to the southwest. The total population relying on groundwater as a drinking water source located within 4-radial miles is an estimated 1,369. To date, no known groundwater samples have been collected from the Vermont Art Studio property.

Runoff from the property flows to the southwest approximately 0.25 miles to a wetland area. The wetland area is the probable point of entry (PPE) to the 15-mile downstream surface water pathway. There are no known surface water intakes located along the 15-mile surface water pathway. To date, no known surface water or sediment samples have been collected from the property or along the 15-mile downstream surface water pathway from the Vermont Art Studio property.

There are currently four full-time employees on the Vermont Art Studio property. The nearest residence is located on the property, approximately 100 ft southeast of the dry well. There are no schools or day-care centers located within 200 ft of the property. The population located within 4-radial miles is an estimated 4,560 people. Approximately 1,453 acres of wetlands are located within 4-radial miles of the Vermont Art Studio property. The nearest wetland is located 0.15 miles southwest of the property. To date, no known soil or air samples have been collected from the Vermont Art Studio property.

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